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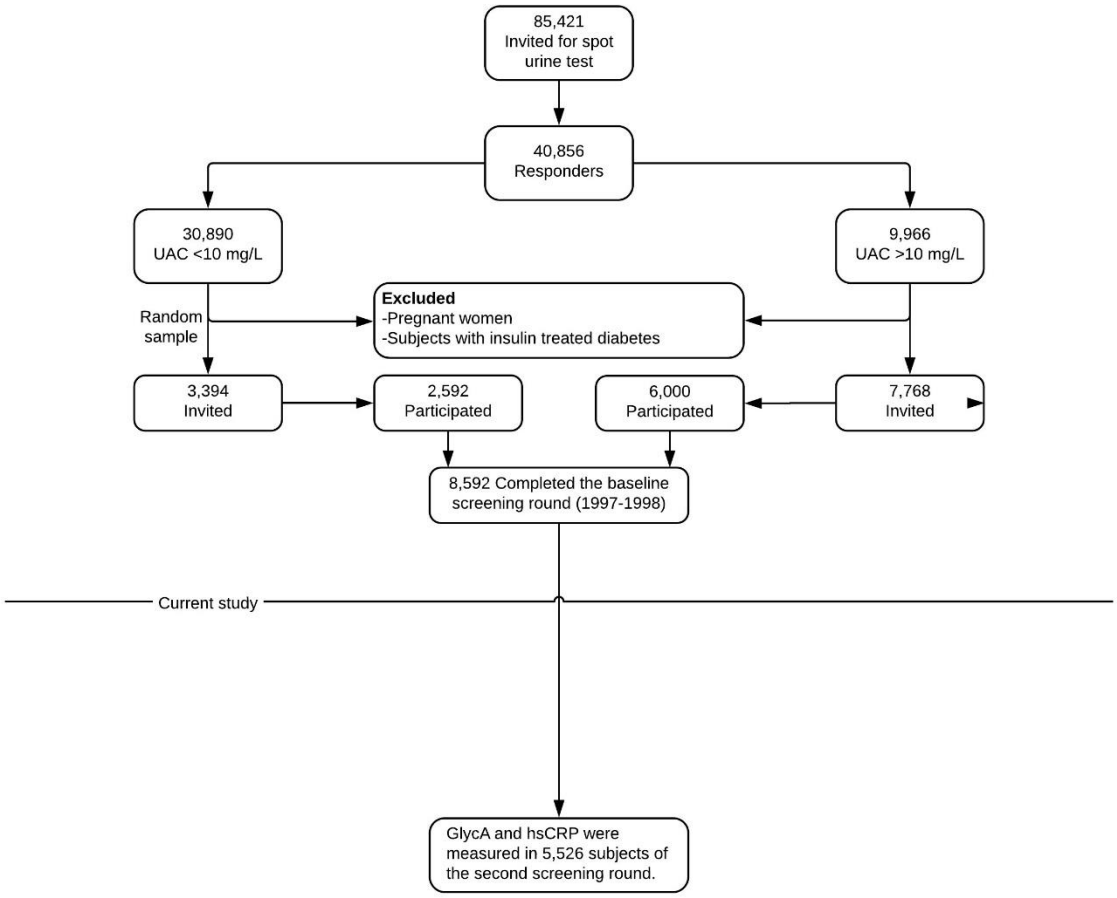
Supplemental figure 1



Supplemental Table 1. Sex-stratified analyses between hsCRP and cancer mortality in 5,526 participants (380 events) of the PREVEND study.

	Quartile 1	**Quartile 2**	P- value	**Quartile 3**	P-value	**Quartile 4**	P-value	P for trend*
Men								
Participants (n)	657	665		652		659		
Range, mgl/L	<0.62	≥0.62		≥1.31		≥2.84		
No. of deaths (%)	18 (2.7)	49 (7.4)		74 (11.3)		107 (16.2)		
Crude	Ref.	**2.74 [1.60-4.70]**	**<0.001**	**4.45 [2.66-7.45]**	**<0.001**	**6.68 [4.06-11.01]**	**<0.001**	**<0.001**
Model 1	Ref.	**1.85 [1.07-3.19]**	**0.027**	**2.50 [1.48-4.25]**	**0.001**	**3.11 [1.86-5.22]**	**<0.001**	**<0.001**
Model 2	Ref.	**1.89 [1.10-3.27]**	**0.022**	**2.55 [1.50-4.33]**	**0.001**	**3.11 [1.85-5.24]**	**<0.001**	**<0.001**
Model 3	Ref.	**1.90 [1.10-3.29]**	**0.021**	**2.57 [1.51-4.37]**	**<0.001**	**3.06 [1.81-5.16]**	**<0.001**	**<0.001**
Model 4	Ref.	**1.90 [1.10-3.29]**	**0.022**	**2.54 [1.49-4.33]**	**0.001**	**3.01 [1.78-5.10]**	**<0.001**	**<0.001**
Model 5	Ref.	**1.93 [1.11-3.34]**	**0.019**	**2.55 [1.50-4.35]**	**0.001**	**2.98 [1.76-5.06]**	**<0.001**	**<0.001**
Model 6	Ref.	**1.86 [1.07-3.22]**	**0.028**	**2.37 [1.38-4.08]**	**0.002**	**2.57 [1.46-4.53]**	**0.001**	**0.019**
Women								
Participants (n)	727	719		722		725		
Range, mg/L	<0.63	≥0.63		≥1.41		≥3.25		
No. of deaths (%)	21 (2.9)	32 (4.5)		41 (5.7)		38 (5.2)		
Crude	Ref.	1.52 [0.88-2.63]	0.14	**1.95 [1.15-3.30]**	**0.013**	**1.84 [1.08-3.13]**	**0.025**	0.08
Model 1	Ref.	1.02 [0.58-1.79]	0.95	1.13 [0.65-1.98]	0.66	1.09 [0.61-1.95]	0.78	0.82
Model 2	Ref.	1.04 [0.59-1.83]	0.89	1.09 [0.62-1.90]	0.76	1.07 [0.59-1.92]	0.83	0.90
Model 3	Ref.	1.09 [0.62-1.93]	0.77	1.15 [0.65-2.05]	0.63	1.12 [0.61-2.05]	0.71	0.85
Model 4	Ref.	1.04 [0.59-1.85]	0.89	1.12 [0.63-2.00]	0.70	1.07 [0.59-1.96]	0.82	0.91
Model 5	Ref.	1.04 [0.59-1.86]	0.86	1.12 [0.62-2.00]	0.71	1.08 [0.58-1.98]	0.82	0.90
Model 6	Ref.	1.01 [0.57-1.81]	0.96	1.06 [0.58-1.92]	0.86	0.95 [0.481.90]	0.88	0.77

Hazard ratios were derived from Cox proportional hazards regression models.

Model 1: crude model + age, sex, BMI, alcohol intake (<10g/d or >10 g/d) and smoking status (never, former current).

Model 2: model 1 + diabetes, systolic blood pressure, lipid lowering drugs and anti-hypertensive medications.

Model 3: model 2 + total cholesterol, HDL cholesterol and triglycerides.

Model 4: Model 3 + history of CVD and history of cancer.

Model 5: Model 4 + $eGFR_{creatinine\ cystatin\ C}$ and UAE.

Model 6: Model 5 + GlycA

Triglycerides, UAE and hsCRP were log transformed when used as a continuous variable in the analyses.

*Tests of trend across increasing quartiles were conducted by assigning the median for each quartile as its value and treating this as a continuous variable.

Abbreviations: *BMI,* body mass index*; HDL-cholesterol,* high density lipoprotein cholesterol; *CVD*, cardiovascular disease; *hsCRP,* high–sensitivity C-reactive protein; *UAE,* urinary albumin excretion; *PREVEND,* Prevention of REnal and Vascular ENd-stage Disease.

Supplemental Table 2. Sex-stratified analyses between GlycA and cancer mortality in 5,526 participants (380 events) of the PREVEND study.

	Quartile 1	**Quartile 2**	P- value	**Quartile 3**	P-value	**Quartile 4**	P-value	P for trend*
Men								
Participants (n)	655	644		667		667		
Range, µmol/L	<305	≥305		≥338		≥381		
No. of deaths (%)	30 (4.6)	47 (7.3)		70 (10.5)		101 (15.1)		
Crude	Ref.	**1.64 [1.04-2.60]**	**0.034**	**2.41 [1.57-3.70]**	**<0.001**	**3.72 [2.48-5.59]**	**<0.001**	**<0.001**
Model 1	Ref.	**1.04 [0.65-1.66]**	**0.19**	**1.34 [0.86-2.06]**	**0.19**	**1.82 [1.19-2.79]**	**0.006**	**<0.001**
Model 2	Ref.	**1.02 [0.64-1.63]**	**0.94**	**1.32 [0.85-2.05]**	**0.21**	**1.78 [1.16-2.74]**	**0.009**	**<0.001**
Model 3	Ref.	**1.06 [0.66-1.70]**	**0.81**	**1.37 [0.87-2.13]**	**0.17**	**1.87 [1.20-2.90]**	**0.006**	**<0.001**
Model 4	Ref.	**1.07 [.67-1.72]**	**0.78**	**1.36 [0.87-2.12]**	**0.18**	**1.84 [1.18-2.87]**	**0.007**	**0.001**
Model 5	Ref.	**1.08 [0.67-1.73]**	**0.76**	**1.35 [0.86-2.11]**	**0.19**	**1.82 [1.16-2.84]**	**0.009**	**0.001**
Model 6	Ref.	0.99 [0.62-1.60]	0.98	1.14 [0.71-1.81]	0.59	1.35 [0.82-2.22]	0.24	0.12
Women								
Participants (n)	712	715		743		723		
Range, µmol/L	<313	≥313		≥352		≥394		
No. of deaths (%)	18 (2.5)	27 (3.8)		45 (6.1)		42 (5.8)		
Crude	Ref.	1.49 [0.82-2.70]	0.19	**2.43 [1.41-4.20]**	**0.001**	**2.35 [1.35-4.07]**	**0.002**	**0.001**
Model 1	Ref.	1.06 [0.58-1.94]	0.86	1.49 [0.84-2.64]	0.17	1.38 [0.76-2.49]	0.29	0.20
Model 2	Ref.	1.05 [0.57-1.92]	0.88	1.39 [0.78-2.47]	0.26	1.29 [0.71-2.34]	0.41	0.33
Model 3	Ref.	1.09 [0.59-2.00]	0.79	1.40 [0.78-2.52]	0.27	1.36 [0.74-2.52]	0.32	0.27
Model 4	Ref.	1.09 [0.59-2.00]	0.79	1.47 [0.81-2.64]	0.20	1.40 [0.76-2.58]	0.28	0.22
Model 5	Ref.	1.10 [0.60-2.02]	0.77	1.47 [0.82-2.65]	0.20	1.41 [0.76-2.60]	0.27	0.22
Model 6	Ref.	1.11 [0.60-2.06]	0.73	1.53 [0.83-2.81]	0.18	1.51 [0.76-3.01]	0.24	0.19

Hazard ratios were derived from Cox proportional hazards regression models.

Model 1: crude model + age, sex, BMI, alcohol intake (<10g/d or >10 g/d) and smoking status (never, former current).

Model 2: model 1 + diabetes, systolic blood pressure, lipid lowering drugs and anti-hypertensive medications.

Model 3: model 2 + total cholesterol, HDL cholesterol and triglycerides.

Model 4: Model 3 + history of CVD and history of cancer.

Model 5: Model 4 + $eGFR_{creatinine\ cystatin\ C}$ and UAE.

Model 6: Model 5 + hsCRP

Triglycerides, UAE and hsCRP were log transformed when used as a continuous variable in the analyses.

*Tests of trend across increasing quartiles were conducted by assigning the median for each quartile as its value and treating this as a continuous variable.

Abbreviations: *BMI,* body mass index*; HDL-cholesterol,* high density lipoprotein cholesterol; *CVD*, cardiovascular disease; *hsCRP,* high–sensitivity C-reactive protein; *UAE,* urinary albumin excretion; *PREVEND,* Prevention of REnal and Vascular ENd-stage Disease.

Supplemental Table 3. Association between GlycA and hsCRP levels and lung cancer mortality in 5,526 participants (57 events) of the PREVEND study.

	Per 1 SD increment	P- value
GlycA		
Crude	**1.61 [1.33-1.95]**	**<0.001**
Model 1	**1.34 [1.07-1.67]**	**0.011**
Model 2	**1.33 [1.06-1.67]**	**0.015**
Model 3	**1.34 [1.07-1.67]**	**0.011**
Model 4	**1.38 [1.02-1.88]**	**0.040**
hsCRP	Per 1 SD increment	
Crude	**1.48 [1.19-1.84]**	**<0.001**
Model 1	1.18 [0.92-1.52]	0.19
Model 2	1.17 [0.91-1.50]	0.23
Model 3	1.18 [0.92-1.51]	0.19
Model 4	0.96 [0.70-1.33]	0.81

Hazard Ratios are given per 1 SD increment in GlycA and hsCRP

Model 1: crude model + age, sex, BMI, alcohol intake (<10g/d or >10 g/d) and smoking status (never, former current).

Model 2: model 1 + history of CVD and history of cancer.

Model 3: model 2 + $eGFR_{creatinine\ cystatin\ C}$ and UAE.

Model 4: Model 3 + hsCRP (for GlycA analyses) + GlycA (for hsCRP analyses).

UAE and hsCRP were log transformed when used as a continuous variable in the analyses.

1 SD is 62 µmol/L for GlycA and 5.22 for hsCRP. Abbreviations: *BMI,* body mass index*; CVD*, cardiovascular disease; *hsCRP,* high–sensitivity C-reactive protein; *UAE,* urinary albumin excretion; *PREVEND,* Prevention of REnal and Vascular ENd-stage Disease.

Supplemental Table 4. Association between GlycA and hsCRP levels and **gastrointestinal cancer mortality** in 5,526 participants (56 events) of the PREVEND study.

	Per 1 SD increment	P- value
GlycA		
Crude	**1.31 [1.04-1.65]**	**0.023**
Model 1	**1.39 [1.09-1.75]**	**0.007**
Model 2	**1.40 [1.10-1.79]**	**0.007**
Model 3	**1.42 [1.11-1.83]**	**0.006**
Model 4	**1.41 [1.01-1.98]**	**0.043**
hsCRP		
Crude	1.22 [0.97-1.55]	0.094
Model 1	1.25 [0.97-1.61]	0.08
Model 2	1.24 [0.97-1.60]	0.09
Model 3	1.25 [0.97-1.61]	0.08
Model 4	1.01 [0.73-1.41]	0.95

Hazard Ratios are given per 1 SD increment in GlycA and hsCRP

The following organs belong to the category of gastrointestinal: bile duct, esophagus, colon + rectum, stomach, pancreas, small intestine and liver.

Model 1: crude model + age, sex, BMI, alcohol intake (<10g/d or >10 g/d) and smoking status (never, former current).

Model 2: model 1 + history of CVD and history of cancer.

Model 3: model 2 + $eGFR_{creatinine\ cystatin\ C}$ and UAE.

Model 4: Model 3 + hsCRP (for GlycA analyses) + GlycA (for hsCRP analyses).

UAE and hsCRP were log transformed when used as a continuous variable in the analyses.

1 SD is 62 µmol/L for GlycA and 5.22 mg/L for hsCRP. Abbreviations: *BMI,* body mass index*; CVD*, cardiovascular disease; *hsCRP,* high–sensitivity C-reactive protein; *UAE,* urinary albumin excretion; *PREVEND,* Prevention of REnal and Vascular ENd-stage Disease.